

West Virginia Department of Environmental Protection

*Austin Caperton
Cabinet Secretary*

Title V Operating Permit Revision



For Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: MM03 **SIC:** 2821
Name of Permittee: The Chemours Company FC, LLC
Facility Name/Location: Washington Works
County: Wood County
Permittee Mailing Address: P. O. Box 1217, Washington, WV 26181-1217

Description of Permit Revision: Incorporate requirements of NSR Permit No. R13-3416 for the installation of three (3) new natural gas fired steam generation boilers to supply process steam to the Washington Works. Incorporate requirements from 45CSR2, 45CSR10, 40 C.F.R. 60 Subpart Db, and 40 C.F.R. 63 Subpart DDDDD.

Title V Permit Information:

Permit Number: R30-10700182-2017 (Part 10 of 14)
Issued Date: June 13, 2017
Effective Date: June 27, 2017
Expiration Date: June 13, 2022

Directions To Facility: Route 68 west from Parkersburg to intersection of Route 892. Continue west on Route 892 with the plant being on the north side about one mile from the intersection of Routes 68 and 892.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

A handwritten signature in blue ink, appearing to read "Laura M. Crowder".

Laura M. Crowder
Acting Director, Division of Air Quality

4/23/19

Date Issued

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
Boilers, Coal Handling, and Ash Handling					
475	P102C ¹ P202C	P02 ²	No. 2 Boiler (Coal Fired, Spreader-Stoker)	64.2 MMBtu/hr	1947
476	P103C P203C	P03 ²	No. 3 Boiler (Coal Fired, Spreader-Stoker)	94 MMBtu/hr	1957
	P104C P204C	P04 ²	No. 4 Boiler (Coal Fired, Spreader-Stoker)	125 MMBtu/hr	1959
477	P105C P205C	P05 ²	No. 5 Boiler (Coal Fired, Spreader-Stoker)	181 MMBtu/hr	1963
	P106C P206C	P06 ²	No. 6 Boiler (Coal Fired, Spreader-Stoker)	241 MMBtu/hr	1965
P09E	None	P09	No. 9 Boiler	249 MMBtu/hr	2020
P10E	None	P10	No. 10 Boiler	249 MMBtu/hr	2020
P11E	None	P11	No. 11 Boiler	249 MMBtu/hr	2020
479	P31C Low NO _x Generation Burners, Lean Burn Controls, and Flue Gas Recirculation	P31	No. 8 Boiler (Natural Gas)	181 MMBtu/hr	1989
474	None	P835	# 1 (Horizontal) Sulfuric Acid Tank	11,600 gallons	1997
		P836	#2 (Vertical) Sulfuric Acid Tank	18,651 gallons	1988
490	Manual Spray	P116	Coal Storage Pile	PTE - 12,000 tons AVG - 4,500 tons	1947
	None	P117	Roadways in Area	N/A	1947

¹ For all the coal-fired boilers P02 through P06, the P100C series of control device IDs are single stage mechanical dust collector/baghouse for control of PM. The P200C series are the sorbent injection control technology for control of HCl and Hg.

² All of the coal-fired boilers P02, P03, P04, P05, and P06 shall be permanently shut down in accordance with permit condition 4.1.24.

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
486	None	P506	Diesel Fuel Storage Tank	3,000 gallons	1995
485	None	P304	Boiler Overhaul Parts Washer	80 gallons	Mid 1980s
494	None	P120	Emergency Generator – ICE	40 HP LP	1999
495	None	P121	#4 Emergency Fire Pump	270 HP diesel	1969
496	None	P122	#1 Emergency Fire Pump	347 HP diesel	2017
497	None	P123	#2 Emergency Fire Pump	347 HP diesel	2017

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R14 - 14	01/02/2002
R13-3223	12/8/2014
R13-2654D	9/17/2015
R13-3416	November 27, 2018

- 3.3.2. Manufacturing process units may be exempted upon written request of the permittee to the Director. Exempted units are exempted from the frequency of testing as described in 45CSR21-37, however, LDAR testing of this unit or certification of emission using approved fugitive emission factors will be required every three years, or upon request by the Director or his duly authorized representative. Waiver or scheduling of LDAR testing every three years may be granted by the Director if written request and justification are submitted by the permittee. Units exempted from testing which may be required under any other applicable State or Federal regulations, orders, or permits. The Director may periodically require verifications by the permittee that maintenance and repair procedures associated with approved exemptions are continued and practiced.

[45CSR13, R13-3223, 4.3.1. and 45CSR§21-40.3.a.2. State-Enforceable only]

- 3.3.3. In the event a source and associated emission point identified in Appendix D of this permit are subject to the MACT standards of 40CFR63, then compliance with the applicable LDAR testing requirements set forth by the MACT and identified in the affected 45CSR13 permit shall demonstrate compliance with the LDAR testing requirements set forth in this permit.

[45CSR13, R13-3223, 4.3.2., 45CSR§21-37.1.c. and 45CSR§27-4.1. State-Enforceable only]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, [R13-3416, 4.4.1.](#), R13-3223, 4.4.1., and R13-2654, 5.4.1.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

~~Associate Director~~ [Section Chief](#)
~~Office of Air Enforcement and Compliance Assistance~~
~~(3AP20)~~
U. S. Environmental Protection Agency, Region III
[Enforcement and Compliance Assurance Division](#)
[Air Section \(3ED21\)](#)
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.10. The permittee shall submit to the DAQ a plan for complete, facility-wide implementation of RACT requirements within one hundred eighty (180) days of notification by the Director that a violation of the National Ambient Air Quality Standards (NAAQS) for ozone (that were in effect on or before May 01, 1996) has occurred. Such plan shall include those sources listed in Appendix D of this permit as part of the site-wide control efficiency requirement and may contain an update of existing RACT analyses. Full implementation of such plan shall be completed within two (2) years of approval of the RACT plan by the Director.

[45CSR13, R13-3223, 4.5.1.]

3.6. Compliance Plan

- 3.6.1. Reserved.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
- a. 40 C.F.R. 60, Subpart D – “Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971.” This subpart applies to each steam generating unit that commences construction or modification after August 17, 1971 and has a heat input capacity of more than 250 MMBtu/hr. The boilers in the Power and Service Support Area are less than 250 MMBTU/hr and Nos. 2, 3, 4, 5, and 6 Boilers were constructed prior to August 17, 1971.
 - b. 40 C.F.R. 60, Subpart Da – “Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After September 18, 1978.” This subpart applies to each steam generating unit that commences construction or modification after September 18, 1978 and has a heat input capacity of more than 250 MMBtu/hr. The boilers in the Power and Service Support Area are less than 250 MMBTU/hr and Nos. 2, 3, 4, 5, and 6 Boilers were constructed prior to September 18, 1978.
 - c. ~~40 C.F.R. 60, Subpart Db – “Standards of Performance for Industrial Commercial Institutional Steam Generating Units.” This subpart applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984 and has a heat input capacity of greater than 100 MMBtu/hr. No. 8 Boiler is subject to this rule, but Nos. 2, 3, 4, 5, and 6 Boilers were constructed prior to the June 19, 1984 applicability date and Nos. 2 and 3 Boilers also have a heat input capacity of less than 100 MMBtu/hr.~~ [45CSR40 - Control of Ozone Season Nitrogen Oxides Emissions. This rule establishes ozone season NO_x emission limitations, MRR, NO_x reduction, and NO_x control standards. Each of the boilers P09, P10, and P11 are proposed to be designed and constructed with a design heat input of 249 MMBtu/hr, which is one \(1\) MMBtu/hr of heat input below the applicability threshold of this rule \(45CSR§40-4.1.\). Requirement 4.2.1. of permit R13-3416 \(operating permit condition 4.2.17.\) requires utilization of fuel meters to meet specification and certification requirements in Appendix D of Part 75 to ensure accurate measurement of the fuel consumption rate and that the heat input of each unit does not exceed 250 MMBtu/hr.](#)

- w. 40 C.F.R. 63, Subpart DD – “National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations.” This subpart applies to units that receive waste/wastewater from off-site operations for treatment or recovery and the off-site waste contains hazardous air pollutants. This subpart does not apply to the Wastewater Treatment Plant at Chemours Washington Works because the treatment of off-site wastewater is not the predominate activity performed at the Washington Works facility as required in 40 C.F.R. §63.680(a)(2)(iii)(B).
- x. 40 C.F.R. 63, Subpart EEE – “National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors.” The Power and Service Support Area does not operate any equipment meeting the definition of a hazardous waste combustor as specified in 40 C.F.R. §63.1201(a).
- y. 40 C.F.R. 63, Subpart JJJ - “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins.” The Power and Service Support Area does not produce the materials listed in 40 C.F.R. §63.1310.
- z. 40 C.F.R. 63, Subpart EEEE – “National Emission Standards for Hazardous Air Pollutants: Organic Liquid Distribution (Non-Gasoline).” The Power and Service Support Area does not operate an organic liquids distribution (OLD) operation or does not handle material organic liquids as defined in §63.2406.
- aa. 40 C.F.R. 82, Subpart B - “Protection of Stratospheric Ozone.” This subpart requires recycling of Chlorofluorocarbons (CFCs) from motor vehicles and that technicians servicing the equipment need to be licensed. The Power and Service Support Area does not conduct motor vehicle maintenance involving CFCs on site.
- bb. 40 C.F.R. 82, Subpart C – “Protection of Stratospheric Ozone.” This subpart bans non-essential products containing Class I substances and bans non-essential products containing or manufactured with Class II substances. The Power and Service Support Area does not use, manufacture, nor distribute these materials.
- cc. 45CSR5 – “To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas. The Power and Service Support Area operates the coal storage and handling facilities under the requirements of 45CSR2 and does not operate a separate coal preparation plant or a coal refuse disposal area that would be subject to 45CSR5.
- dd. 45CSR6 – “To Prevent and Control Air Pollution from Combustion of Refuse.” The Power and Service Support Area does not engage in the combustion of refuse in any installation or equipment.
- ee. 45CSR18 – “To Prevent and Control Emissions from Commercial and Industrial Solid Waste Incineration Units.” The Power and Service Support Area does not operate any equipment defined by 45CSR§18-2.3 as a commercial and industrial solid waste incineration (CISWI) unit.
- ff. 45CSR§21-40 – “Other Facilities that Emit Volatile Organic Compound (VOC).” None of the emission sources in the Power and Service Support Area have maximum theoretical emissions of 6 pounds per hour or more and are subject to the requirements of this section. In addition, 45CSR§21-40.1.d. specifically exempts wastewater treatment facilities from the requirements in 45CSR§21-40.
- gg. 40 C.F.R. Part 97, Subparts AAAAA, BBBB, and CCCCC – CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 1 Trading Program, and CSAPR SO₂ Group 1 Trading Program. The boilers at the facility are not utilized to produce electricity for sale; therefore, these regulations are not applicable since the criteria in 40 C.F.R. §§ 97.404(a)(1), 97.504(a)(1), and 97.604(a)(1) are not met.

4.0 Requirements for Nos. 2, 3, 4, 5, and 6 Boilers, Coal Handling, and Ash Handling (Em. Unit IDs: P02, P03, P04, P05, and P06; Em. Pt. IDs: 475, 476, and 477), and Nos. 9, 10, and 11 Boilers (Em. Unit IDs: P09, P10, and P11; Em. Pt. IDs: P09E, P10E, and P11E)

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. These visible emission standards shall apply at all times except in periods of start-ups, shutdowns and malfunctions.

[45CSR§§2-3.1 and 9.1] *(emission points 475, 476, and 477)*

- 4.1.2. Particulate matter emissions from Boiler Nos. 2, 3, 4, 5, and 6 shall not exceed 63.47 lb/hr. The allowable emission rates for individual stacks are specified in the approved monitoring plan (See Appendix A).

[45CSR§§2-4.1.c and 4.2; 45CSR§2A-4.2] *(emission points 475, 476, and 477)*

- 4.1.3. No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.

Methods to minimize fugitive particulate matter are set forth in the approved monitoring plan (See Appendix A).

[45CSR§2-5.1]

- 4.1.4. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR§2-9.2]

- 4.1.5. Sulfur dioxide emissions from Boiler Nos. 2, 3, 4, 5, and 6 shall not exceed 2,186.12 lb/hr. The allowable emission rates for individual stacks are specified in the approved monitoring plan (See Appendix B).

[45CSR§§10-3.1.e and 3.4; 45CSR§10A-4.1] *(emission points 475, 476, and 477)*

- 4.1.6. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary for a fuel burning unit to comply with the visible emission standards set forth in 4.1.1 or any emergency situation or condition creating a threat to public safety or welfare, the Director may grant an exception to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during the exception period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the emissions standards under 4.1.2 will not be exceeded during the exemption period.

[45CSR§2-10.1]

fuel fired during the performance test (e.g., if the performance test was conducted at 100 percent solid fuel firing, for 100 percent load firing 50 percent solid fuel and 50 percent natural gas the load fraction is 0.5).

[40 C.F.R. §63.7500(a)(2), Table 4, Item 5; 40 C.F.R. §§63.7505(a) and 63.7575; 45CSR34] (P02, P03, P04, P05, and P06)

- 4.1.18. **Operating Load.** When complying with a Table 2 numerical emission limit using performance testing, you must meet this operating limit:

For boilers and process heaters that demonstrate compliance with a performance test, maintain the 30-day rolling average operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test.

[40 C.F.R. §63.7500(a)(2), Table 4, Item 7; 40 C.F.R. §63.7505(a); 45CSR34] (P02, P03, P04, P05, and P06)

- 4.1.19. **Oxygen Analyzer System.** When complying with a Table 2 numerical emission limit using an oxygen analyzer system, you must meet this operating limit:

For boilers and process heaters subject to a CO emission limit that demonstrate compliance with an O₂ analyzer system as specified in §63.7525(a), maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the CO performance test, as specified in Table 8. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a).

[40 C.F.R. §63.7500(a)(2), Table 4, Item 8; 40 C.F.R. §63.7505(a); 45CSR34] (P02, P03, P04, P05, and P06)

- 4.1.20. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 C.F.R. §63.7500(a)(3); 45CSR34] (P02, P03, P04, P05, and P06)

- 4.1.21. If you have an applicable emission limit, and you choose to comply using definition (2) of “startup” in §63.7575, you must develop and implement a written startup and shutdown plan (SSP) according to the requirements in Table 3 to 40 C.F.R. 63 Subpart DDDDD (permit condition 4.1.14.). The SSP must be maintained onsite and available upon request for public inspection.

[40 C.F.R. §63.7505(e); 45CSR34] (P02, P03, P04, P05, and P06)

4.1.22. The following conditions and requirements are specific to Boilers Nos. 9, 10, and 11 (P09, P10, and P11):

- a. CO emissions emitted to the atmosphere from each boiler shall not exceed 19.92 pounds per hour on a 3-hour average with an annual rate not to exceed 87.25 tpy. Initial compliance with this limit shall be satisfied through testing as required in Condition 4.3.21. After the initial compliance demonstration, verifying compliance with this hourly limit shall be satisfied by optimization of the CO concentration

from the unit during the tune-up as required in Condition 4.1.23. and verifying compliance with the annual limit shall be determined by satisfying the fuel usage limit of Condition 4.1.22.f.

- b. NO_x emissions emitted to the atmosphere from each boiler shall not exceed 0.20 pounds per MMBtu. Compliance with this limit shall be determined on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days. This limit applies at all times including periods of startup, shutdown, or malfunction.
[40 CFR §§60.44b(a), (a)(1)(ii), (h), and (i); §§60.46b(a), (c), and (e)(4); 45CSR16]
- c. From the emission point of each boiler shall not exhibit visible emissions greater than ten (10) percent opacity. Monitoring of these units with respect to this standard is satisfied by complying with the fuel limitation of item d. of this condition.
[45CSR§2-3.1. and 8.4.b.; 45CSR§2A-3.1.a.]
- d. Each boiler shall only be fired with pipeline quality natural gas. Complying with this condition satisfies compliance with the limitations of 45CSR§2-3.1. (ten percent opacity in condition 4.1.22.c.), 45CSR§2-4.1.b. (67.2 lb/hr of PM) and 45CSR§10-3.1.e. (2,316 lb/hr of SO₂).
[45CSR§2-3.1.; 45CSR§2-4.1.b.; 45CSR§2-8.4.b.; 45CSR§2A-3.1.a.; 45CSR§10-3.1.e.; 45CSR§10-10.3.; 45CSR§10A-3.1.b.]
- e. Each boiler shall be equipped, maintained, operated with a continuous oxygen trim system that maintains an optimum air to fuel ratio for each unit. Such system shall be installed upon initial start-up of the unit.
[40 CFR §63.7575; 45CSR34]
- f. Each boiler shall be designed or constructed with a maximum design heat input of no greater than 249 MMBtu/hr. Compliance with this limit for each boiler shall be satisfied by limiting the annual consumption of natural gas to 2,077.00 MM cubic feet, measured as a 12-month rolling total.
- g. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 CFR §63.7500(a)(3); 45CSR34]

[45CSR13, R13-3416, 4.1.1.]

4.1.23. The permittee shall conduct the initial tune-up and subsequent tune-ups for the boilers in accordance with the following timing and tune-up requirements:

- a. The initial tune up for Boiler Nos. 9, 10, and 11 shall be completed no later than 61 months after initial start-up of each affected unit respectively.
[40 CFR §63.7510(g) and §63.7515(d)]
- b. Subsequent tune-ups for Boiler Nos. 9, 10, and 11 shall be completed no later than 61 months after the previous tune-up.
[40 CFR §§63.7515(d) and 63.7540(a)(12)]
- c. Each tune-up shall consist of the following:

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
 - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, which includes minimizing NO_x concentration to the manufacturer's specification;
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- d. You may delay the burner inspection specified in paragraph (a)(10)(i) of §63.7540 (condition 4.1.23.c.i.) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.
- e. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.
- f. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR13, R13-3416, 4.1.2.; 40 CFR §§ 63.7500(a)(1), 63.7505(a), 63.7510(g), 63.7515(d), 63.7540(a)(10)(i) through (v), 63.7540(a)(12), 63.7540(a)(13), and Item 1 of Table 3 to Subpart DDDDD of Part 63—Work Practice Standards; 45CSR34]

4.1.24. Within 180 days after initial start-up of Boiler Nos. 9, 10, and 11, the permittee must permanently shut-down Boiler Nos. 2, 3, 4, 5, and 6.
[45CSR13, R13-3416, 4.1.3.; 45CSR§14-2.46.h.]

4.1.25. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of R13-3416 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-3416, 4.1.4.; 45CSR§13-5.10.] (Control Device IDs: P102C, P103C, P104C, P105C, P106C, P202C, P203C, P204C, P205C, and P206C)

4.1.26. If you have a new or reconstructed boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD by April 1, 2013, or upon startup of your boiler or process heater, whichever is later.
[40 C.F.R. §63.7495(a); 45CSR34] (P09, P10, P11)

- 4.2.16. In the event that COMS is out of control as described in condition 4.2.10.(6) when the associated boiler P02, P03, P04, P05, or P06 is operating, the permittee shall perform Method 9 opacity monitoring at least once every thirty (30) minutes until the COMS is returned to operation. The permittee shall maintain records of the monitoring in accordance with condition 4.4.4.

[45CSR§30-5.1.c.] (P02, P03, P04, P05, and P06)

- 4.2.17. The permittee shall monitor and record the amount of natural gas consumed by Boiler Nos. 9, 10, and 11 during each operating day and calculate the annual capacity factor for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity calculated at the end of each calendar month. Such records shall be maintained in accordance with Condition 3.4.2. of this permit. Compliance with the record retention requirements in Condition 3.4.2. ensures compliance with 40 C.F.R. §60.49b(o).

[45CSR§2-8.3.c.; 40 CFR §60.49b(d)(1); 40 C.F.R. §60.49b(o); 45CSR16]

The fuel flowmeters used to monitor the natural gas consumed by Boiler Nos. 9, 10, and 11 shall have the accuracy of 2.0 percent of the upper range value (i.e. maximum fuel flow rate measurable by the flowmeter) across the range of fuel flow rate to be measured at the unit. Flowmeter accuracy may be determined under Section 2.1.5.1 of Appendix D to Part 75 Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units of Chapter 40 for initial certification in any of the following ways (as applicable): by design (orifice, nozzle, and venturi-type flowmeters, only) or by measurement under laboratory conditions; by the manufacturer; by an independent laboratory; or by the owner or operator. Flowmeter accuracy may also be determined under Section 2.1.5.2 of Appendix D to Part 75 Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units of Chapter 40 by in-line comparison against a reference flowmeter. Alternatively, an orifice, nozzle or venturi flowmeter may be certified if: (a) the primary element (for example, the orifice plate) meets the design criteria specified in American Gas Association Report No. 3; (b) the primary element passes a visual inspection; and (c) the pressure, temperature, and differential pressure transmitters are calibrated with standards traceable to the National Institute of Standards and Technology (NIST).

[45CSR13, R13-3416, 4.2.1.]

- 4.2.18. NO_x CEMS for Boiler Nos. 9, 10, and 11.

- a. For Boiler Nos. 9, 10, and 11, the permittee shall install, operate, certify, and maintain a continuous emission monitoring system (CEMS) for measuring NO_x, and diluent gas (CO₂ or O₂) from the exhaust of each boiler in accordance with the applicable Performance Specifications under Appendix B to Part 60 of Chapter 40. Such monitoring system shall include an automated data acquisition and handling system (DAHS). All required certification tests of the monitoring system for each boiler must be completed within 180 calendar days after initial start-up of each respective boiler.
- b. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. The span value for NO_x shall be 500 ppm or the NO_x span value determined according to Section 2.1.2. in Appendix A to Part 75 of Chapter 40.
- c. The CEMS required under this condition shall be operated and data recorded during all periods of operation of the respected boiler except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- d. Quarterly accuracy determinations and daily calibration drift test shall be performed in accordance with Procedure 1 of Appendix F of Part 60 except as provided in 40 CFR §60.47b(e)(4).

- e. The 1-hour average NO_x emission rates measured by the continuous NO_x monitor required by this condition and required under 40 CFR §60.13(h) shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates under item b of Condition 4.1.22. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(h)(2).
- f. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of Part 60, Method 7A of Appendix A of Part 60, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- g. For purposes of calculating data averages, the permittee cannot use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities. The permittee must use all the data collected during all other periods in assessing compliance with the emission limit permitted in Condition 4.1.22.b Any periods for which the monitoring system is out of control and data are not available for required calculations constitute a deviation from the monitoring requirements. Records of all data collected, calibrations, calibration checks, relative accuracy tests, maintenance performed, and malfunctions of the CEMS shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR13, R13-3416, 4.2.2.; 40 C.F.R. §§60.48b(b) though (f); 40 C.F.R. §60.48b(g)(1); 45CSR16]

4.3. Testing Requirements

- 4.3.1. The permittee shall periodically conduct or have conducted weight emission tests to determine compliance of each fuel stack with the weight emissions standards set forth in 4.1.2 for emission points 476 and 477. Weight emission tests shall be conducted in accordance with 45CSR2 Appendix “Compliance Test Procedures for 45CSR2” or other equivalent EPA approved method approved by the Director. The results of the baseline compliance tests established the weight emission testing cycle to be used for subsequent testing. Subsequent weight emission tests shall be conducted at a frequency established in the following tables:

Baseline Weight Emission Test Results	Resulting Testing Cycle
≤ 50% of weight emission standard	Cycle 3
Between 50% and 80% of weight emission standard	Cycle 2
≥ 80% of weight emission standard	Cycle 1

Testing Cycle	Test Results	Retesting Cycle
Cycle 1	After three successive tests indicate mass emission rates ≤ 50% of weight emission standard	Cycle 3
	After two successive tests indicate mass emission rates <80% of weight emission standard	Cycle 2
	Any test indicates a mass emission rate ≥ 80% of weight emission standard	Cycle 1
Cycle 2	After two successive tests indicate mass emission rates ≤ 50% of weight emission standard	Cycle 3

Cycle 3	Any test indicates a mass emission rate <80% of weight emission standard	Cycle 2
	Any test indicates a weight emission rate ≥ 80% of weight emission standard	Cycle 1
	Any test indicates a mass emission rate ≤ 50% of weight emission standard	Cycle 3
Cycle 3	Any test indicates a mass emission rate between 50% and 80% of weight emission standard	Cycle 2
	Any test indicates a mass emission rate ≥ 80% of weight emission standard	Cycle 1
	Any test indicates a mass emission rate ≥ 80% of weight emission standard	Cycle 1

Cycle '1' means that testing shall be performed within twelve (12) months from the date of the previous test, but no earlier than six (6) months from the date of the previous test.

Cycle '2' means that testing shall be performed within twenty-four (24) months from the date of the previous test, but no earlier than twelve (12) months from the date of the previous test.

Cycle '3' means that testing shall be performed within thirty-six (36) months from the date of the previous test, but no earlier than eighteen (18) months from the date of the previous test.

The dates for the most recent weight emission tests conducted for emission points 475, 476, and 477 and the resulting testing cycles are as follows:

Emission Point	Emission Unit	Last Test Date	Testing Cycle
475	No. 2 Boiler	2/24/2016 *	Cycle 3
476	No. 3 Boiler	4/13/2016	Cycle 3
	No. 4 Boiler	2/23/2016 *	Cycle 3
477	No. 5 Boiler	4/14/2016	Cycle 3
	No. 6 Boiler	4/15/2016 *	Cycle 3

* Note: Boilers 2, 4, and 6 were tested during the last week of February 2017 for PM and SO₂, but the results were not available at the time of writing the renewal permit.

The Director reserves the right to require testing pursuant to 4.3.2 and 4.3.4.

[45CSR§2-8.1.a; 45CSR§§2A-5.2.a, 5.3, 2.6.a, 2.6.b, and 2.6.c]

- 4.3.2. At such other reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 4.1.2. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained.

[45CSR§§2-8.1.b and 8.1.b.1] (P02, P03, P04, P05, and P06)

- 4.3.3. The permittee shall conduct or have conducted, weight emission tests to determine the compliance of emission points 475, 476 and 477 with the weight emission standards set forth in 4.1.5 at a frequency established in the following table. Weight emission tests shall be conducted in accordance with 40 C.F.R. 60, Appendix A, Method 6 or other equivalent EPA testing method approved by the Director.

% of Factor	Testing Frequency
≤ 50% of Factor	No stack testing required
Between 50% and 90% of Factor	Once/5 years
≥ 90% of Factor	Once/year

The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

The dates for the most recent weight emission tests conducted for emission points 475, 476, and 477 and resulting testing frequencies are as follows:

Emission Point	Emission Unit	Last Test Date	Testing Frequency
475	No. 2 Boiler	2/24/2016 *	Once/year
476	No. 3 Boiler	4/13/2016	Once/year
	No. 4 Boiler	2/23/2016 *	Once/year
477	No. 5 Boiler	4/14/2016	Once/year
	No. 6 Boiler	4/15/2016 *	Once/year

* Note: Boilers 2, 4, and 6 were tested during the last week of February 2017 for PM and SO₂, but the results were not available at the time of writing the renewal permit.

[45CSR§10-8.1.a; 45CSR§10A-5.1.a]

- 4.3.4. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 4.1.2 or 4.1.5.

[45CSR§2-8.1.c; 45CSR§10-8.1.b] (P02, P03, P04, P05, and P06)

- 4.3.5. **CAM Testing Requirements.** Chemours will perform periodic weight emission testing on P02 and P03 on a frequency based upon the initial testing with the subsequent testing frequency as follows; greater than or equal to 80% of the emission standard (as defined within the 45CSR2/45CSR2A Monitoring Plan) will require annual testing; greater than 50% but less than 80% of the emission standard will require testing within 2 years of the previous test; less than or equal to 50% of the emission standard will require testing within 3 years of the previous test. The site will notify and obtain concurrence with WVDAQ regarding the testing frequency and the basis for this interpretation prior to the implementation of a testing schedule. A test protocol document will be provided for WV DAQ review and approval as per the requirements specified in 45CSR2 Appendix.

[40 C.F.R. §64.6(b), 45CSR§30-5.1.c] (Em. Unit ID: P02, P03)

- 4.3.20. If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §§63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §§63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.

[40 C.F.R. §63.7540(a)(6); 45CSR34] (P02, P03, P04, P05, and P06)

- 4.3.21. The purpose of this requirement is for the permittee to demonstrating initial compliance with the CO emission limit in Condition 4.1.22.a. Within 180 days after start-up and a satisfactory performance evaluation of the NO_x CEMS, the permittee shall conduct initial performance testing for Boiler Nos. 9, 10, and 11 to demonstrate initial compliance with the hourly CO rate in Condition 4.1.22.a. for each unit. The permittee shall conduct such testing at 90 percent or greater of each unit's maximum design heat input, in accordance with Test Method 10B from Appendix A to 40 CFR Part 60, and Condition 3.3.1. In the test report, the permittee shall include the NO_x measurement from the NO_x CEM for each test run of each test. Records of this testing shall be maintained in accordance with Condition 3.4.2.
[45CSR13, R13-3416, 4.3.1.]

- 4.3.22. To determine initial compliance with the emission limits for NO_x required under 40 CFR §60.44b and Conditions 4.1.22.b., the permittee shall conduct the performance test for Boiler Nos. 9, 10, and 11 as required under 40 CFR §60.8 using the continuous system for monitoring NO_x (NO_x CEMS) under Condition 4.2.18. Such testing shall be conducted within 60 days after achieving the maximum production rate at which the affected unit will be operated, but not later than 180 days after initial startup of the boiler.

NO_x emissions from the steam generating unit are to be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standards under Condition 4.1.22.b. and 40 CFR §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. Such testing shall be conducted in accordance with Condition 3.3.1. and 40 CFR §60.46b. Records of this testing shall be maintained in accordance with Condition 3.4.2.

[45CSR13, R13-3416, 4.3.2.; 40 CFR §§ 60.8, 60.46b(c), and (e)(1); 45CSR16]

4.4. Recordkeeping Requirements

- 4.4.1. The permittee shall retain records of all required monitoring data and support information as established in the monitoring plan (see Appendices A and B) for a period of at least five (5) years from the date of monitoring, sampling, measurement, reporting, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§2-8.3.a; 45CSR§2A-7.1.b; 45CSR§10-8.3.a; 45CSR§10A-7.1.d; 45CSR§30-5.1.c.2.B] (P02, P03, P04, P05, and P06)

4.4.2. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator may maintain such records in an electronic format.

a. For coal, records of the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and a periodic fuel quality analysis conducted as follows:

Ash	Per Shipment
BTU	Daily
Sulfur Content	Daily

[45CSR§§2-8.3.c and 8.3.d; 45CSR§2A-7.1.a.4; 45CSR§§10-8.3.c and 8.3.d; 45CSR§10A-7.1.a] ([P02](#), [P03](#), [P04](#), [P05](#), and [P06](#))

4.4.3. The permittee shall provide in the monitoring plan a quality control and quality assurance program for the fuel analysis. If a certified independent lab is used to provide the fuel analysis, the quality control assurance program is deemed to be satisfactory.

[45CSR§10A-7.1.a.1] ([P02](#), [P03](#), [P04](#), [P05](#), and [P06](#))

4.4.4. Records of each visible emission observation and each Method 9 evaluation conducted in accordance with 4.2.16 shall be maintained for a period of at least five (5) years in accordance with 3.4.2. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the observer.

[45CSR§30-5.1.c.] ([P02](#), [P03](#), [P04](#), [P05](#), and [P06](#))

4.4.5. The permittee shall monitor all fugitive particulate emission sources as required by 4.1.3 to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained for a period of at least five (5) years in accordance with 3.4.2 and shall state the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.] ([P02](#), [P03](#), [P04](#), [P05](#), and [P06](#))

4.4.6. Records of the visible emission observations required in 4.2.3 shall be maintained documenting the date and time of each visible emission check, the name of the responsible observer, the results of the check, and, if necessary, all corrective actions taken.

[45CSR§30-5.1.c.] (*Sorbent Silos; Emission Point I.D. 493*)

4.4.7. **CAM Recordkeeping Requirements.** The permittee shall maintain the following records for each baghouse on Equipment IDs P02 and P03:

a. Daily records of the differential pressure drop observations conducted in accordance with Condition 4.2.4.

b. Records of the annual inspections conducted on the differential pressure transmitters (including pressure gauge and reader) conducted in accordance with Condition 4.2.4. Records shall note any maintenance performed on these devices.

- c. For each excursion as specified in Condition 4.2.4., records of the date of the occurrence and all corrective actions taken.
- d. Records of inspection and maintenance performed on each baghouse, including the frequency of bag/filter change outs. Records shall state the date and time, the results of the inspection, and maintenance or corrective actions taken, if any.

All records shall be maintained on site as per Condition 3.4.2.

[40 C.F.R. §64.9(b)(1); 45CSR§30-5.1.c] (*Em. Unit ID: P02, P03*)

- 4.4.8. As specified in §63.7555(d)(1), on a monthly basis you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in the following:

- (ii) Equal to or lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing.

[40 C.F.R. §§63.7540(a)(2), (a)(2)(ii), and 63.7555(d)(1); 45CSR34] (*P02, P03, P04, P05, and P06*)

- 4.4.9. You must keep records according to paragraphs (1) and (2) of this condition.

- (1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual* compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

** Note – For boilers P09, P10, and P11, the compliance reports are required every five (5) years pursuant to 40 C.F.R. §63.7550(b) in permit condition 4.5.9.*

- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[40 C.F.R. §63.7555(a); 45CSR34] (*P02, P03, P04, P05, and P06, P09, P10, and P11*)

- 4.4.10. For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (1) through (5) of this condition.

- (1) Records described in §63.10(b)(2)(vii) through (xi).
- (2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).
- (3) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).
- (5) Records of the date and time that each deviation started and stopped.

[40 C.F.R. §63.7555(b); 45CSR34] (*P02, P03, P04, P05, and P06*)

- 4.4.17. You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.
[40 C.F.R. §63.7555(d)(9); 45CSR34] (*P02, P03, P04, P05, and P06*)
- 4.4.18. You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.
[40 C.F.R. §63.7555(d)(10); 45CSR34] (*P02, P03, P04, P05, and P06*)
- 4.4.19. For each startup period, for units selecting paragraph (2) of the definition of “startup” in §63.7575 you must maintain records of the time that clean fuel combustion begins; the time when you start feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged.
[40 C.F.R. §63.7555(d)(11); 45CSR34] (*P02, P03, P04, P05, and P06*)
- 4.4.20. If you choose to rely on paragraph (2) of the definition of “startup” in §63.7575, for each startup period, you must maintain records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (*e.g.*, CEMS, PM CPMS, COMS, ESP total secondary electric power input, scrubber pressure drop, scrubber liquid flow rate) collected during each startup period to confirm that the control devices are engaged. In addition, if compliance with the PM emission limit is demonstrated using a PM control device, you must maintain records as specified in paragraph (ii) of this condition.

- (ii) For a boiler or process heater with a fabric filter, record the number of compartments in service, as well as the differential pressure across the baghouse during each hour of startup.

[40 C.F.R. §63.7555(d)(12); 45CSR34] (*P02, P03, P04, P05, and P06*)

4.4.21. **Format and Retention of Records for 40 C.F.R. 63 Subpart DDDDD.**

- (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34] (*P02, P03, P04, P05, ~~and P06~~, [P09](#), [P10](#), and [P11](#)*)

4.4.22. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 of R13-3416, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-3416, 4.4.2.] (Control Device IDs: [P102C](#), [P103C](#), [P104C](#), [P10C5](#), [P106C](#), [P202C](#), [P203C](#), [P204C](#), [P205C](#), and [P206C](#))

4.4.23. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-3416, 4.4.3.] (Control Device IDs: P102C, P103C, P104C, P10C5, P106C, P202C, P203C, P204C, P205C, and P206C)

4.4.24. The permittee shall keep the following records in accordance with 40 CFR §63.7555. This includes but is not limited to the following information during the tune-up as required in Condition 4.1.23. and 40 CFR §63.7540:

- a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. During the tune-up, concentrations of NO_x from the CEMS of the unit shall be included; and
- b. A description of any corrective actions taken as a part of the tune-up.

[45CSR13, R13-3416, 4.4.4.; 40 CFR §§ 63.7540 (a)(10)(vi)(A) and (B), and §63.7555(a); 45CSR34]

4.4.25. The permittee shall maintain records of the following information for each steam generating unit operating day for Boiler Nos. 9, 10, and 11:

- a. Calendar date;
- b. The average hourly NO_x emission rates (expressed as NO₂) (lb/MMBtu heat input) measured;
- c. The 30-day average NO_x emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

- d. Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under Condition 4.1.22.b. (40 CFR §60.44b), with the reasons for such excess emissions as well as a description of corrective actions taken;
- e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
- f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- g. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;
- h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
- j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of Part 60.

Such records shall be maintained in accordance with Condition 3.4.2. of this permit. Compliance with the record retention requirements in Condition 3.4.2. ensures compliance with 40 C.F.R. §60.49b(o).

[45CSR13, R13-3416, 4.4.5.; 40 CFR §§ 60.49b(g) and (g)(1) through (g)(10); 40 C.F.R. §60.49b(o); 45CSR16]

4.4.26. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Records of all required monitoring data and support information shall be maintained on-site for a period of at least five years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

[45CSR§§2A-7.1.a., 7.1.a.1., and 7.1.b.] (P09, P10, P11)

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency as set forth in the approved monitoring plan (See Appendices A and B). To the extent that an excursion of particulate matter emissions is due to a malfunction, the reporting requirements in 4.5.2 shall be followed. [45CSR§2-8.3.b; 45CSR§§2-7.2.c and 7.2.d; 45CSR§10-8.3.b; 45CSR§10A-7.2.b] (P02, P03, P04, P05, and P06)
- 4.5.2. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:
 - a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
- b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in subdivision 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3] ([P02](#), [P03](#), [P04](#), [P05](#), and [P06](#))

4.5.3. General Reporting Requirements for 40 C.F.R. Part 64 (CAM).

- a. On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit monitoring reports to the DAQ in accordance with permit condition 3.5.6.
- b. A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable)
 - iii. A description of the actions taken to implement QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c] (*Em. Unit ID: P02, P03*)

- (5) You may submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.

You must submit the reports according to the procedures specified in paragraphs (h)(1) and (3) of this §63.7550, which are:

- (1) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests, including any fuel analyses, following the procedure specified in either paragraph (h)(1)(i) or (ii) of §63.7550.
- (3) You must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[40 C.F.R. §§63.7550(a), Table 9, Items 1.a., 1.b., 1.c., and 1.d.; 40 C.F.R. §§63.7550(b), (c)(1), (c)(3), (c)(5), (d), and (e); 40 C.F.R. §§63.7550(h)(1) and (3); 40 C.F.R. §63.7540(b); 45CSR34] (P02, P03, P04, P05, and P06)

4.5.7. The permittee shall submit a “Notification of Compliance Status” for Boiler Nos. 9, 10, and 11 to the Director before the close of business on the sixtieth (60th) day after completion of the initial compliance demonstration as required in Condition 4.1.24. Such “Notification of Compliance Status” shall be in accordance with 40 CFR §63.9(h)(2)(ii) and contain the information specified in 40 CFR §63.7545(e)(1), (6), (7), and (8), which includes a statement the initial tune-up for each boiler was completed.

- (1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.
- (2) Reserved.
- (3) Reserved.
- (4) Reserved.
- (5) Reserved.
- (6) A signed certification that you have met all applicable work practice standards.

- (7) If you had a deviation from any work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
- (8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
- (i) “This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi).”

[45CSR13, R13-3416, 4.5.1.; 40 C.F.R. §§ 63.7495(d), 63.7530(f), 63.7545(a), 63.7545(e), 63.7545(e)(1), 63.7545(e)(6), 63.7545(e)(7), and 63.7545(e)(8); 40 C.F.R. §63.9(h); 45CSR34]

- 4.5.8. The permittee shall submit an “Initial Notification” to the Director of the initial start-up of Boiler Nos. 9, 10, and 11 within 15 days after the actual date of start-up. This Initial Notification supersedes the notification requirements of Condition 2.18. of R13-3416 (i.e., 30 calendar days after the actual startup).

[45CSR13, R13-3416, 4.5.2.; 40 C.F.R. §§ 63.7495(d), 63.7545(c) and 40 C.F.R. §60.49b(a) and §60.7; 45CSR16; 45CSR34]

- 4.5.9. The permittee shall submit “5-year Compliance Reports” for the Boiler Nos. 9, 10, and 11 electronically using CEDRI that is accessed through the EPA’s Center Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form for this report is not available in CEDRI at the time the report is due, the permittee shall submit the report to the Administrator and Director using the addresses listed in Condition 3.5.3. The first compliance report shall be submitted no later than five years after the initial start-up of the unit and the first date ending on January 31. Subsequent reports shall be submitted once every five years afterwards. Such reports shall contain the information specified in 40 CFR §§63.7550(c)(1) which are:

- a. Permittee and facility name, and address;
- b. Process unit information, emission limitations, and operating limitations;
- c. Date of report and beginning and ending dates of the reporting period;
- d. Include the date of the most recent tune-up for each boiler; and
- e. Include the date of the most recent burner inspection if it was not done on a five-year frequency and was delayed until the next scheduled or unscheduled unit shutdown.
- f. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

The permittee shall maintain records of such reports in accordance with Condition 3.4.2.

[45CSR13, R13-3416, 4.5.3.; 40 CFR §§ 63.7550(a), 63.7550(b), (b)(1), (c)(1), & (c)(5)(i) though (iii), (xiv), and (xvii), and 63.7550(h)(3); 45CSR34]

4.5.10. The permittee shall submit to the Director within 60 days of completion of NO_x CEMS performance evaluation for Boiler Nos. 9, 10, and 11 two copies of the performance evaluation report for each unit to satisfy Part 60 notification requirements for certifying the NO_x CEMS.
[45CSR13, R13-3416, 4.5.5.; 40 CFR §§60.13(c), (c)(2), and §60.49b(b); 45CSR16]

4.5.11. The permittee shall submit semiannual and annual reports to the Director for Boiler Nos. 9, 10, and 11. The reporting period for these reports shall be January 1st through June 30th and July 1st through December 31st. Such reports shall be submitted with the facility's Title V Compliance Report. These reports shall contain the recorded information as required in Condition 4.4.25. during the reporting period and report any excess emissions that occurred during the reporting period.

For purposes of §60.48b(g)(1) (condition 4.2.18.), excess emissions are defined as any calculated 30-day rolling average NO_x emission rate, as determined under §60.46b(e) (condition 4.3.22.), that exceeds the applicable emission limit in §60.44b (condition 4.1.22.b.).

[45CSR13, R13-3416, 4.5.6.; 40 CFR §§60.49b(g), (h), (h)(2), (h)(4), (i), & (w); 45CSR16]

4.5.12. Within 30 days of satisfying Condition 4.1.24., the permittee shall notify the Director of such actions in accordance with 3.5.1.
[45CSR13, R13-3416, 4.5.7.; 45CSR§13-5.10.]

4.6. Compliance Plan

4.6.1. Reserved.